

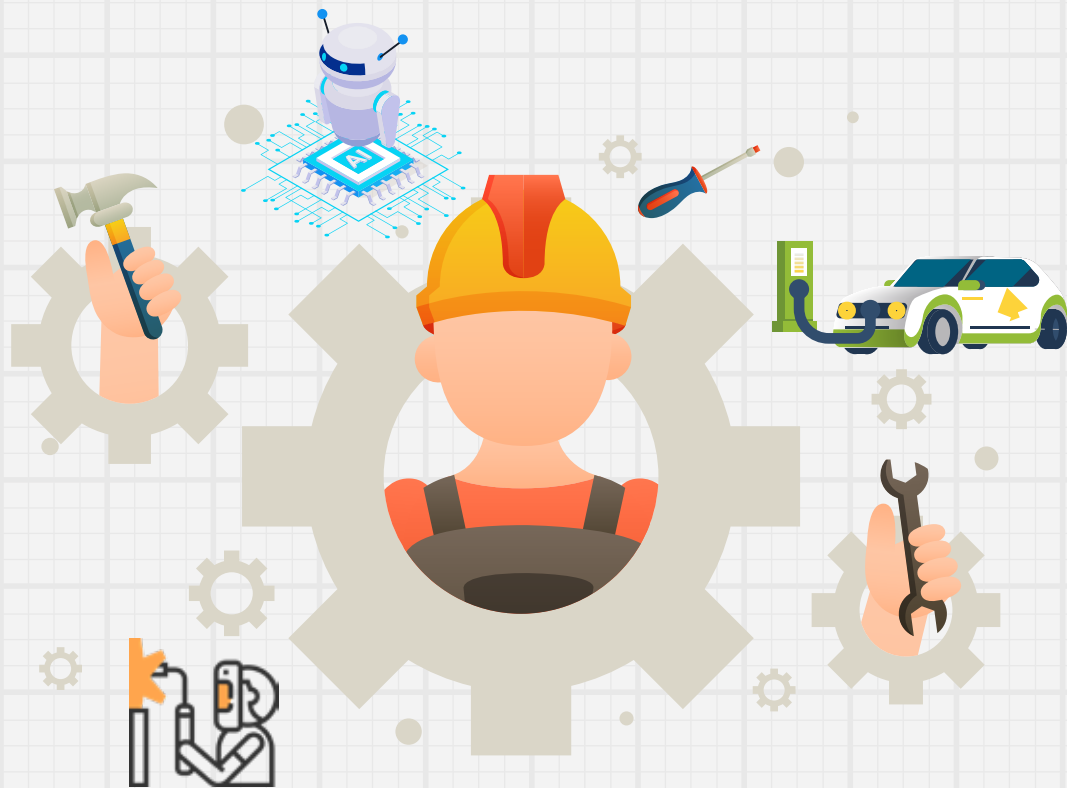


OPJU

UNIVERSITY OF STEEL TECHNOLOGY
AND MANAGEMENT



Bi-Annual Newsletter
July-December 2023



**Department of
Mechanical Engineering**

Courses Offered

Diploma in Mechanical Engineering

***B.Tech in Mechanical Engg with Specialization
in Robotics & AI***

***B.Tech in Mechanical Engg with Specialization
in Mechatronics & Automation***

***M.Tech in Manufacturing Technology &
Automation***

***M.Tech in Power Plant Engineering &
Energy Management***

Ph.D (Doctor of Philosophy)

About Mechanical Engineering Department

The Mechanical Engineering Department is well known for its quality of teaching and supportive environment provided to the students. The state-of-the-art laboratories, highly qualified, experienced and dedicated faculty and staff member's experiential learning make this Department a vibrant place to study. Our programs provides flexible curriculum enabling the students to achieve their goals and make them industry ready. Presently department is active in various thrust areas of research interdisciplinary.

Department Overview

- Honoured with Most prestigious AICTE-CII Industry Linked Award 2021
- Awarded with highest star rating (3.5/4.0) in Institutional Innovation Council
- 100% Faculty from IIT,NIT and other Institutes of national importance
- Industry based updated & flexible curriculum with minor courses in CSE & Management aligned with NEP 2020
- Curriculum in alignment with Industry 4.0
- Industrial Engineering & Production Management based dedicated courses.
- Industrial visits and project-based learning for students.
- Smart Classrooms equipped with multimedia board
- Experiential learning through compulsory 6-month long-term internship
- Knowledge-sharing sessions from industry & academic experts
- Frequent certificate courses on emerging technologies
- MOU's with leading research labs and industries
- Numerous student societies/chapters/clubs

Industry Tailored Value Added Courses

- Stainless Steel Technology
- Plant Maintenance & Safety
- Problem Solving & Design Thinking
- Electric Vehicles
- Solar Energy Technology
- Advanced Welding Technology
- CNC & Additive Manufacturing
- AI & Data Science
- CAD/CAE Certificate Courses
- Future of Alternative Fuels
- Industrial IOT
- Nanotechnology Composite Material



Prominent Hands-on Training Facilities

- Centre of Excellence in Manufacturing & Automation
- Centre of Excellence in Robotics
- Modelling & Simulation Lab
- High Performance Computing Lab
- Hydraulics & Pneumatics Lab Industrial IoT Lab
- Electric Vehicle Lab
- Energy Systems Lab
- Mechanical Characterization Lab
- Mechanical Vibration Lab
- Solar Energy Lab

Department Laboratories Infrastructure

- Material Design and Tribology Lab
- Mechanical Vibration Lab
- Electric Vehicle Lab
- CAD/CAM Lab
- 15MW Turbine-Generator set-up
- Energy Systems Lab
- Mechanical Characterization Lab
- Aerodynamics and Solar Energy Lab

Central Workshop

- Machine shop
- Special purpose machines
- Fitting Shop
- Carpentry Shop
- Foundry Shop
- Welding Shop
- CNC Lab

Industry Partner



Advanced Facilities



CNC Lathe Machine



CNC Wire Cut EDM



CNC Milling Machine & CNC Lathe Machine



Laser Acrylic sheet cutting Machine



Welding Fume Extractor



Turbine Generator set full scale model



Six-Axis Welding Robot



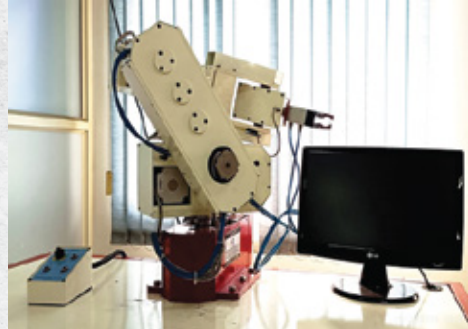
Advanced Welding Simulator for safe and hassle free welding training



Muffle Furnace



Scorbot 5-axis Robot



6-axis educational Robot Trainer



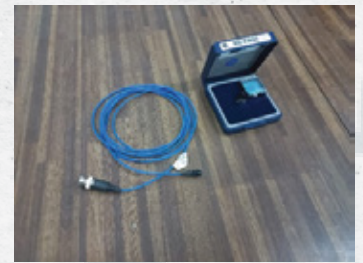
Advance heat pipe performance test rig



Thermal imager



Sound level meter



Single axis accelerometer



Tri-axis accelerometer



Dual channel solar PV VI characteristic logger

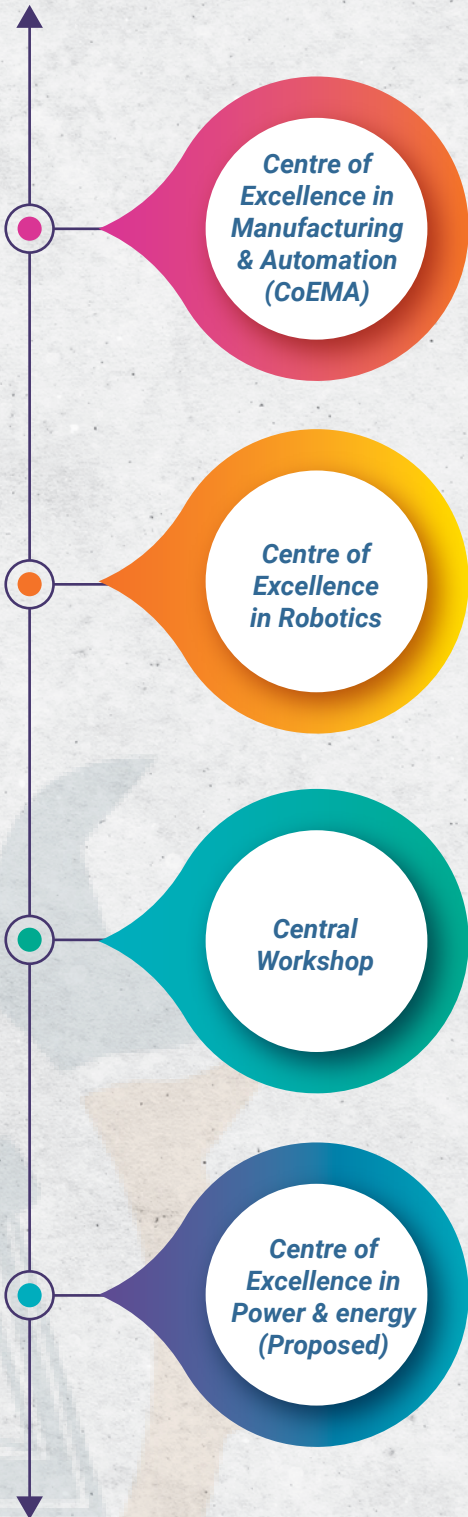


Solar PV/Thermal collector performance test rig

Research Facility Upgradation

- A flexi fuel internal combustion engine procurement is under process for research in combustion theory, fuel blends and Hybrid engines.
- A plate heat exchanger performance test rig procurement is under process.
- Solar energy laboratory with Solar PV and thermal characteristic test rig is under development.
- Centre of Excellence in Power and Energy (CoEPE) is proposed to be established.
- 16 channel temperature logger and process controller has been recently procured by the department.
- Dual channel VI characteristic logger for universal Solar PV performance measurement has been procured recently.
- Solar PV and thermal collector test rig has been developed at the central workshop facility of the department.

CENTRES OF EXCELLENCE AND ADVANCED LABORATORIES



Dr. Umesh Kumar Vishwakarma
Centre Head



Dr. Saroj Kumar
Centre Head



Prof. Jitesh Singh
Centre Head



Dr. Mithilesh Kumar Sahu
Centre Head



Dr. Kuber Nath Mishra
Centre Head

Advance Electric & Hybrid Vehicle Lab



Dr. Dharmender Singh Saini
Faculty In Charge

Modelling & Simulation Lab



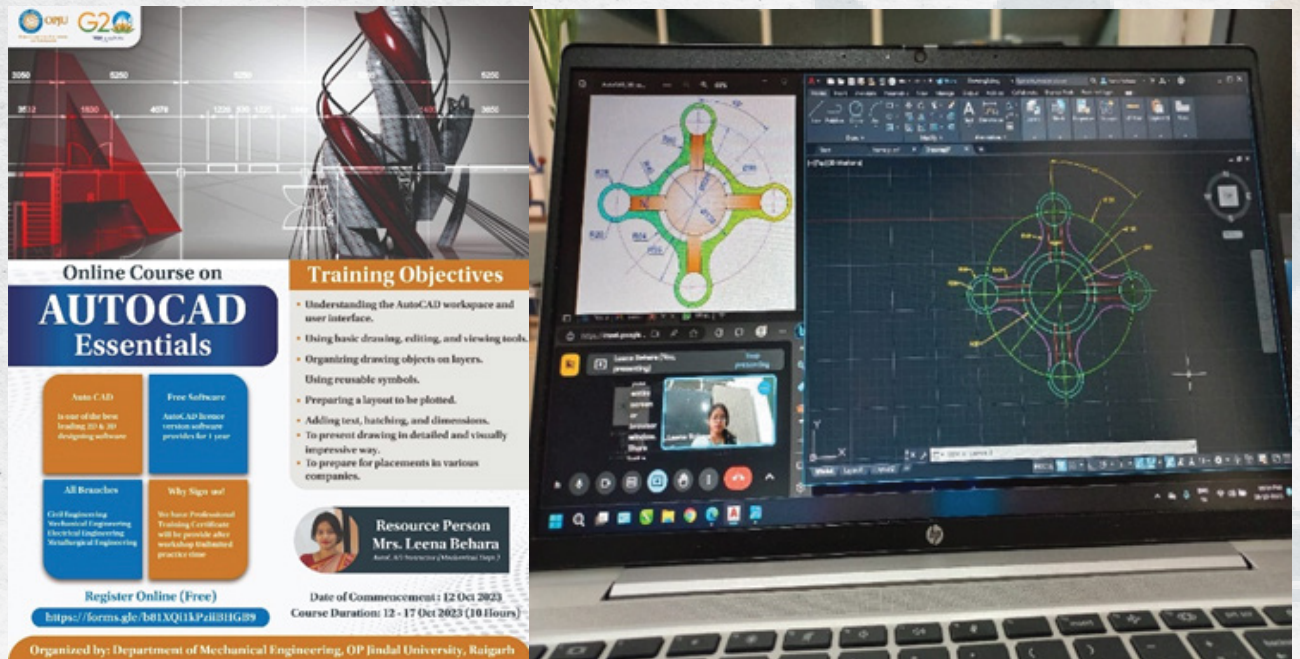
Dr. L.R. Bhandarkar
Faculty In Charge

Hands on Training and Workshops

- 60+ student participants from within and outside the University actively took part in a workshop cum hands-on training on "Drone Technology" from 21st – 23rd August 2023. The event was conducted by the department in collaboration with the Centre of Excellence in Robotics (CoER) and the Institutions Innovation Council (IIC OPJU).



- Final year students of B tech program refined their CAD skills at the Five-Day workshop from 12th to 17th October 2023 organised by the department in association with the OPJU SAE Collegiate Club.

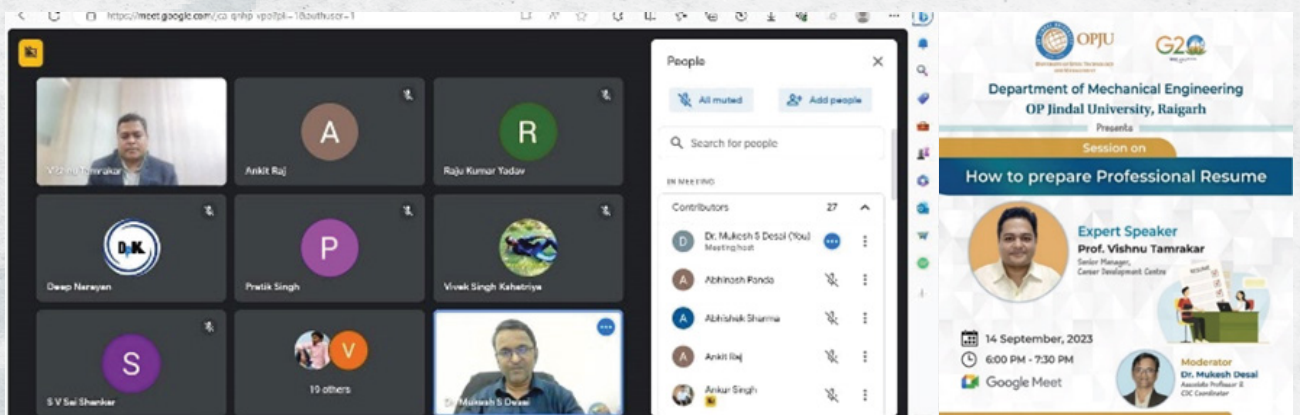


- The 3rd year students of B. Tech program are now learning "Fundamentals of Robotics" through a course tailor made to suit the industry requirements in line with the New National Education Policy (NEP 2020). The activities encompass the fundamentals of programming, robot design, and fabrication, offering students a unique and enriching educational experience.



Interpersonal Skill Development

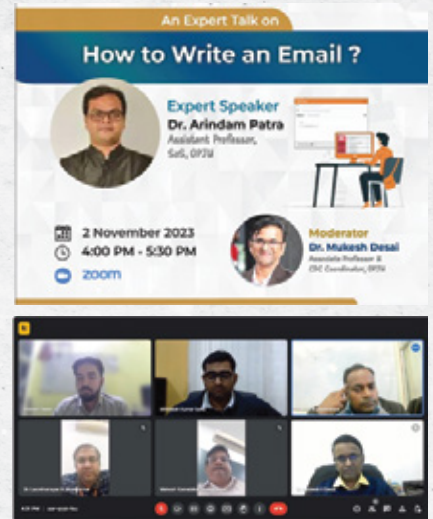
- A professional resume is the biggest tool to a bright career. To better equip our students with this tool, the department in collaboration with the Career Development Centre (CDC) organized a session on “How to Prepare Professional Resume” on 14th September 2023. This event was organised for students in the 7th and 5th semesters, aimed at equipping them with the essential skills necessary for success in placement drives.



- Interviews are mirrors to student’s capabilities. To groom our students for the challenges of job interviews and equip them with essential skills and knowledge to secure their dream positions, the department in collaboration with the Career Development Centre (CDC), organized “Interview Readiness” session on 26th September 2023. This event was organised for the students of the 7th and 5th semesters.



- Communication skills play a pivotal role in career development. Effective communication through E-mail writing, is a skill that students must possess before graduating. The School of Engineering and School of Science, OPJU jointly organized an online Expert Talk titled "How to Write an Email?" on 2nd November 2023, catering to pre-final and final year students. The primary aim of the session was to familiarize students with essential email etiquette.
- The department organized pre-placement training sessions for the 7th-semester students. Session included Mock Personal Interviews covering both technical and HR aspects, in preparation for the upcoming campus drives at OPJU. These sessions aimed to furnish students with a platform for securing favourable placement opportunities.



Internships & Industrial Visit

- To promote experiential learning, a two-week training for Diploma 5th semester students at Nalwa Steel & Power Ltd (NSPL), Raigarh and Steel Structure Division (SSD) was organized by the department from November 29th to December 12, 2023.
- 75 students of the Department of Mechanical and Metallurgical Engineering successfully completed the Industrial Course on "Introduction to Stainless Steel", conducted by OPJU in partnership with Jindal Stainless Steels (JSL).

On Campus Placements and Long-Term Internships

- 100% of our B tech 2019-23 batch students are placed at reputed multinational core sector companies with an average annual package of 8 lakhs per annum.
- More than 100% placement (1+ Job offers) for diploma student of 2023 batch.
- On Campus placement for the current 2024 batch students is in full swing with companies like JSP, JSW, JSL, TATA Hitachi, Arcelor Mittal/ Nippon steel, L&T etc. recruiting our students.
- M. Tech students are also placed at respectable positions in Satvik Group, JSP etc.
- Long term internships (min 3 months) are compulsory for all students of Diploma, B. Tech and M tech. programs and the department assists them in arranging the internships at reputed core companies.
- Mr. Shushant Mukherjee, a 3rd-semester M. Tech student, and Mr. Aman Kumar, a 7th-semester B. Tech student, have secured long-term paid internship offers from TATA Hitachi, Kharagpur.



Our Recruiters



Department of Mechanical Engineering School of Engineering

Thanks our Industry Connects for providing long-term Internship opportunities to our students



and many more.....

Webinars Organised

- The students of the Mechanical and Electrical Engineering, attended an insightful session on "Entrepreneurship and Innovation" as a potential career path. The session's focus was on "Career and Business Opportunities for EV Enthusiasts." This engaging talk was organized by the OPJU Innovation Centre, in collaboration with Formula Bharat and IIC-OPJU, showcasing the commitment to fostering innovation and entrepreneurship within the academic community.



Innovation and IPR Training

- The Department of Mechanical Engineering in association with the Institutional Innovation Council (IIC) OPJU organised a session on "Innovation & IPR" for the students of 5th semester. Dr Satish Kanhed, Innovation Ambassadors & IPR coordinator of the University served as the facilitator, guiding students through the fundamental concepts of patents and fostering a deeper understanding of the subject.



Combined GATE 2024 Exam Preparations

- The School of Engineering, organized a successful GATE Mock Test for pre-final year students across all engineering branches on December 15, 2023. Over 60 enthusiastic students participated in this test. The test was aimed at better equipping the students for the upcoming GATE 2024 exams by means of real time simulation of the test. The test acted as a boost the morale of the aspirants by providing them an in-depth analysis of their performance. Pratham Kumar Thawait, Akash Pandey with Kevin B Kuriakose and Vishal Pandey from the department, scored 1st, 2nd and 3rd positions in this test.



Competition Readiness

Electric car for rally (Solaric2.0) Project

- The students UG and diploma program are developing a solar powered car to participate in ESVC 3000, Asia's biggest Solar-Electric Vehicle Design Competition Endorsed by NITI Aayog. The solar powered car is being developed to endure a total run of 500 km and will be powered by electric motors. The car is being developed under the mentorship of Dr. Kuber Nath Mishra and Dr. Dharmendra Singh Saini at the central workshop of the department.



Electric Formula Motorbike (Vikrant) Project

- The students from UG program of the department in collaboration with UG students of electrical department have developed an electric bike 'Vikrant' to participate in ISIE e- bike competition to be held from 24 to 28 January 2024 at IEC college Bhopal. The team will be contesting against 150+ teams for this title.



Multirole Hex Copter Drone Project

- Mr. Somesh Chandra Final year B. Tech student has developed Multirole Hex copter Drone as a part of his long-term internship that can be effectively implemented for various role with 16 Litre. Volumetric Capacity, 25 kg Payload capacity the drone can take off and land with 2 cm of possible error and can accurately map the Agriculture Geology.



Formula Racing Car (Vayu Project)

- The student formula car team 'VAYU' were delighted to host Mr Somashish Pradhan for delivering a key session on tips and foundational insights of building the formula Car for the upcoming event. His suggestions were duly noted and implemented by the team towards refining the vehicle. The event was organised by the department, in association with the SAEINDIA Collegiate Club of OPJU on 30th November 2023.



Participations in National/ International Championship

- The students form UG program of the department in collaboration with UG students of electrical department have developed an electric bike 'Vikrant' to participate in ISIE e- bike competition to be held from 24 to 28 January 2024 at IEC college Bhopal.

The team will be contesting against 150+ teams for this title.



- Mr Ankur Singh & Mr Sanskar Pandey of final year B. Tech. Participated in Yukti Innovation Challenge. Their project focused on developing an automated welding table incorporating a fume extraction system & retractable shielding glass. Regional meet 2023 of Institution Innovation Council held at Nagpur Maharashtra on 13th Dec 2023. The Meet was organised by G.H.Raisoni College of Engineering in association with MOE's Innovation Cell & AICTE.



Social Activities

- The department in association with #NSS (OPJU) organized a Clean Campus (Swatchata hi Seva) and Understanding of Solar Energy program under the AICTE Activity Points Programme on 5th Oct 2023. In the program about 40+ students have actively participated in cleaning at various locations of the campus.



- The Department in association with NSS (OPJU) organized an Awareness campaign on "Carrier Opportunities, Cybercrime and Women Health & Hygiene", under the AICTE Activity Points Programme at the Higher Secondary School of Charratagar Village on 30th November 2023. Through the program, about 200 students of school were benefited by the awareness about the importance of higher studies, use of internet banking, online fraud. Sanitary pads were also distributed among the female beneficiaries of the village as a part of the awareness program.

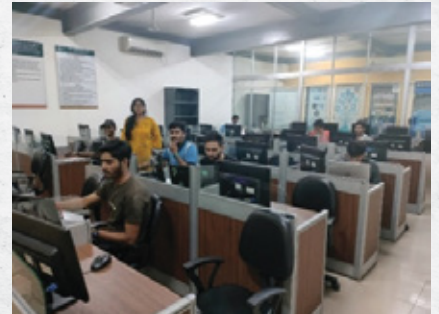


Extra-curricular Activities

- A insight into self-realisation and control was inspired by Swami Omkarananda ji, senior international teacher, Art of Living, Representative of Guru Sri Sri Ravishankar Ji, Founder of The Art of Living Foundation through a motivational session on “My Journey, My story” on 6th October, 2023 and coordinated by Dr. Satish Kanhed.



- The student team consisting of all programs of Mechanical engineering together organized a grand Teachers day celebration on 05th September. The teachers & students had a great quality time together and rejoiced the events and fun activities.
- The department commemorated Engineer's Day on 15th September 2023, in honour of the birth anniversary of the renowned Bharat Ratna Shri Mokshagundam Visveswaraya. The occasion featured a series of technical events, including CAD modelling, technical quiz, and poster presentations, which allowed students to actively engage and display their inherent talents and technical skills.



- Vishwakarma Pooja, a celebration that pays tribute to Lord Vishwakarma, the divine architect and craftsman, was organised with great enthusiasm and devotion by the Department of Mechanical Engineering at Central Workshop on 17th September 2023. The event marked a day of acknowledging and celebrating the contributions of craftsmen, artisans, and engineers to society.



Outstanding Student Achievement

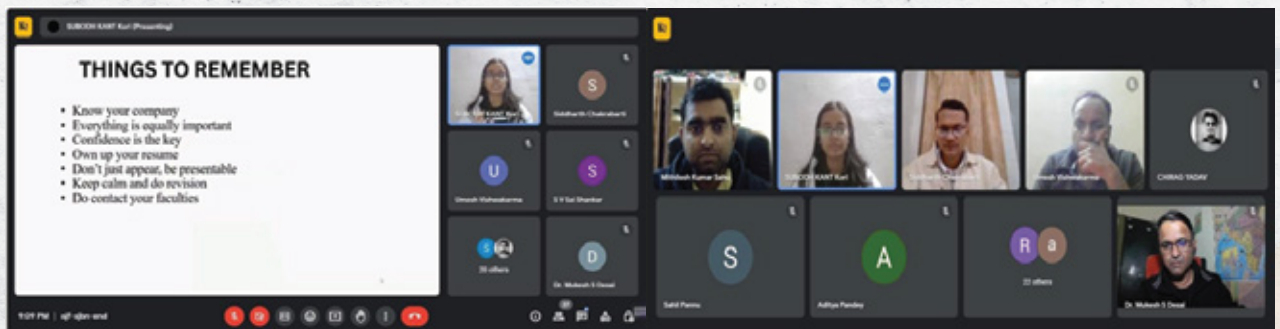


Dr. Rahul Makade, a doctoral scholar of Dr. S.S. Chakrabarti achieved an academic milestone by securing an outstanding postdoctoral research opportunity at the prestigious Schaefer School of Engineering and Science at Stevens Institute of Technology (established in 1870 and globally ranked below 600) in Hoboken, USA.

Dr. Rahul Makade
(Post Doctoral researcher at Stevens
Institute of Technology, USA)

Alumni Talk

Alumni sessions serve as vibrant platforms, nurturing learning, mentorship, networking, and personal growth opportunities for junior students. During one such session, Divya Kori, a Graduate Engineer Trainee at Arcelor Mittal-Nippon Steel and an alumna of the School of Engineering's Department of Mechanical Engineering shared her success story and the challenges encountered along her academic and professional journey.



Departmental Section

Research Papers/Patent Publications

- Dr. Mukesh Shyamkant Desai, published a Design Patent titled Water Tank with Refrigeration Unit with application Number 386188-001
- Prof. Dharmendra Singh Saini published a research article titled 'Tribological Performance evaluation of Greases on Four Ball Tester with Nanoparticles Graphene Oxide in the journal ACS Omega'.
- Dr. Mahesh Bhiwapurkar published a research article titled 'Development and Analysis of Rolling Contact Fatigue Squat Crack in Wheel/Rail-Weld System Using Finite Element Modelling' in European Chemical Bulletin.
- Dr. Mukesh Shyamkant Desai, registered his industrial design with patent application number 363716-001.
- Prof. Jitesh Singh, published a research article titled 'Thermal stability and dynamic mechanical analysis of nano-bio fillers blended hybrid composites reinforced by cellulosic Borassus flabellifer L. Fiber in International Journal of Polymer Analysis and Characterization.
- Dr. Siddharth Chakrabarti published an article titled 'Heat Transfer Analysis in Sound-Enhanced Fluidized Beds Containing Geldart BC Binary Mixtures' in International Journal of Membrane Science and Technology.
- Dr. Siddharth S Chakrabarti & Dr Satish Kanhed has been published in the "Journal of Engineering Science and Technology Review" (Scopus Indexed). Titled "Enhancing Power Output through the Development of a Hybrid Photovoltaic Thermal System" DOI: 10.25103/jestr.166.19

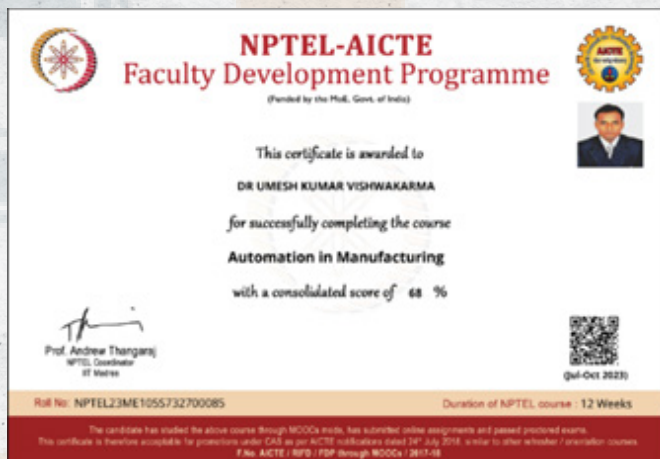
- Dr. Mukesh Shyamkant Desai published an article titled 'Mathematical Modelling for The Cost of Quality: A Case of Steel Plant Activities' in the Industrial Engineering Journal, Volume: 52, Issue 9, No.3, ISSN: 0970-2555
- Dr. Mukesh Shyamkant Desai published an article titled 'Modified Single Minute Exchange of Die for Reduction of Ambulance Response Time in the Industrial Engineering Journal, Volume : 52, Issue 9, No.3, ISSN: 0970-2555
- Dr. Mukesh Shyamkant Desai published an article titled 'Modelling of Reverse Logistic Approaches: A Proposed Framework' in the Industrial Engineering Journal, Volume : 52, Issue 9, No.3, ISSN: 0970-2555
- Prof. Jitesh Singh, published a research article titled 'Experimental investigation on tribo-performance of rice husk nanoparticles blend epoxy composites reinforced by Borassus flabellifer L. fibre using neural network approach' in SCI Journal: Materials today communication with impact factor 3.8 (Cite Score 4.1)

Faculty Development Programs

- Prof. Jitesh Singh, & Mrs. Leena Behara, successfully attended 5 days short-term training program on "Role of IoT in Smart Systems and Infrastructure" organised by the Department of Electrical Engineering, OPJU during 3rd – 7th of October 2023.



- Dr Umesh Vishwakarma, successfully completed 12-week online NPTEL-AICTE Faculty Development Programme on "Automation in Manufacturing". IIT Madras offered the course.



- Dr Kuber Nath Mishra, attended one week Workshop on "Advancement in Renewable Energy, Design and Manufacturing" from 30th October to 03rd November 2023. The workshop was organised by the Department of Mechanical Engineering, NIT Manipur

Industrial Trainings and Consultancy

- The Department in collaboration with the CoEMA, OP Jindal University Raigarh organized a one-month Industrial Internship program sponsored by the Science & Engineering Research Board (SERB), Department of Science and Technology (DST), Govt of India, under the Accelerate Vigyan Vritika scheme from August 1, 2023.

The training consisted of training Virtual Welding Simulator. SMAW, MMAW, and GTAW welding techniques in various workpiece positions followed by a substantial amount of practice on the simulator. The internship concluded on August 31, 2023.

Dr. Ravindra Saluja, conducted a successful session on "Total Productive Maintenance" for the employees of MSP Raigarh. on 30th October 2023



- In an effort to prepare the school students for the latest technological advancements, the department organised an interactive cum hands-on training session on "Fundamentals of Robotics" for the budding Engineers and students of OP Jindal School, Tamnar on 19th Oct, 2023. The students gained practical hands on training in robotics and interacted with faculty during their visit to the advance facilities in the department.
- The department, in association with the Centre of Excellence in Manufacturing and Automation (CoEMA), conducted a five-day CNC training program from 4th to 8th December 2023. The program was designed to equip students with practical knowledge and hands-on experience in Computer Numerical Control (CNC) operations, fostering their understanding of modern manufacturing techniques.



- The Department in association with the (CoEMA), organized a Training Programme (Certificate Course) on “Codes and Standard in Welding” from 6th to 7th July 2023. The training covered various topics namely– Basics of welding, WPS and PQR as per AWS D1.1 and IS standards, EN ISO 1090, EN ISO 3834, ISO 5817, Grouping of materials, Welder qualification, Welding procedure qualification, Welding operator qualification, NDT-personnel, Welding coordination, Inspection & testing during welding. The training was conducted for the Steel structural division of Jindal Steel & Power.



Industry/Academia Delegates Visit

- Senior Executives from NTPC, Lara, visited the Centres of Excellence and the academic facilities of the University on 18th August 2023. The visit was a unique opportunity to bridge the gap between academia and real-world applications.



- Senior officials from Tata Hitachi, Kharagpur, visited the Centres of Excellence and the academic facilities of the University on 5th September 2023. The visit was a significant event aimed at fostering collaboration, sharing knowledge, and strengthening the industry-academic partnership.



- The district collector Raigarh, Mr. Taran Prakash Sinha, visited the academic and research facilities of the department and appreciated the efforts taken by the department towards improvement of employability skills in students.



- Mr. Bimalendra Jha, MD, JSP paid a visit to the department and University campus and addressed the faculty members with a session on Theory of Constraints on 6th December.

Industry-Academia Collaboration Activities

IEEE Workshop

- The department in collaboration with Department of Electrical and Computer Science Engineering in association with Jindal Institute of Power Technology, Jindal Power Limited, Tamnar organized a workshop on 'Emission Control Strategies in Thermal Power Plants' on 31st October 2023 in hybrid mode. The event was successfully conducted in association with IEEE IRC, Institution Innovation Council & IEEE MP Section. 90+ participants from power plant fraternity attended the workshop.



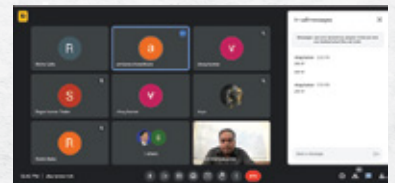
MoU with NTPC

- Expanding its horizon of activities, OP Jindal University has entered into a Memorandum of Understanding (MoU) with NTPC Lara. The MoU envisages advancement and enhancement of joint initiatives to further industry-academia interface and collaboration in research and development studies, projects and surveys, capacity building programmes, etc. Dr Mahesh Bhiwapurkar, Professor, from OP Jindal University and Mr Diwakar Kaushik, Director, NTPC Lara were present in the signing occasion.



Faculty Invited as Resource Person

- Dr Mithilesh Kumar Sahu, Associate Professor, Prof. Akash Pandey, Sr. Assistant Professor, and Dr Kuber Nath Mishra, Assistant Professor delivered expert lectures at Jindal Institute of Power Technology (JIPT) Tamnar, during 14th - 17th August 2023
- Dr Umesh Kumar Vishwakarma, Associate Professor (Sr. Grade), Department of Mechanical Engineering delivered a guest lecture on "Introduction to Ethics in Research" organized by Christian College of Engineering and Technology, Bhilai, Chhattisgarh on 17th August 2023.



Achievements/Awards/Recognitions

Student Achievement

- Ms. Nikita Sahu of 5th-semester successfully coordinated the "Drone Technology" workshop conducted at the OPJU campus.



- Mr Rohan Sharma of 5th-semester B Tech. secured 1st position in the Technical Quiz and 3rd position in Poster Making and Presentation competitions organised by the Department on the occasion of "Engineers Day Celebration" (15th September 2023).

- Mr. Vishal Pandey of 5th-semester B Tech. secured 2nd position in the Poster Presentation competition organised on the occasion of "Engineers Day Celebration" (15th September 2023).
- Mr Shishir Santosh Mishra of 5th-semester Diploma secured 2nd position in the Poster Making and Presentation competition organised on the occasion of "Engineers Day Celebration" (15th September 2023).



- Ms. Nikita Sahu and Mr Prathmesh Gupta of 5th-semester B Tech. , for successfully coordinating and organising various events during the "Engineer's Day Celebration" on 15th September 2023.
- Mr. Pratik Singh of 7th-semester B. Tech. won "Gold medal in Powerlifting (115 Kg)" a district-level championship organised at Jamshedpur.



- Mr. Sanskar Pandey of 7th semester B. Tech. student for received the prestigious OP Jindal Engineering & Management Scholarship for the year 2023.
- Mr. Vishal Pandey, Mr. Akash Pandey, Mr. Pratham Thawait from 5th-semester B Tech. and Mr. Shubham Yadav, Mr. Prince Ku. Singh from 7th-semester B. Tech. successfully completed the 12-week NPTEL course on "Automation in Manufacturing". Mr. Shubham Yadav scored 81% marks and passed with flying colours in an ELITE+SILVER category. They have all received certificates of completion for their commendable efforts.
- Mr. Shubham Yadav of 7th-semester B. Tech. was awarded certificate of completion for attending the 12-week NPTEL course on "Energy Conservation and Waste Heat Recovery".
- Mr. Manish Kumar Gupta, 7th-semester student successfully completed the 8-week NPTEL course on "Advanced Machining Process". He has received the certificate of completion for his commendable effort.
- Mr. Shikhar Pandey, 5th semester student successfully coordinated the workshop on "AI for students: Build Your own Generative AI Model" conducted at OPJU campus by NXT Wave.



NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to **AKASH PANDEY**
for successfully completing the course
Automation in Manufacturing

with a consolidated score of **68 %**

Online Assignments	19.9/25	Proctored Exam	48/75
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Total number of candidates certified in this course: **1510**

Jul-Oct 2023
(12 week course)



NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to **SHUBHAM YADAV**
for successfully completing the course
Automation in Manufacturing

with a consolidated score of **81 %**

Online Assignments	21.25/25	Proctored Exam	60/75
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Total number of candidates certified in this course: **1610**

Jul-Oct 2023
(12 week course)



NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to **SHUBHAM YADAV**
for successfully completing the course
Energy Conservation and Waste Heat Recovery

with a consolidated score of **43 %**

Online Assignments	13.35/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **206**

Jul-Oct 2023
(12 week course)



NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to **MANISH KUMAR GUPTA**
for successfully completing the course
Advanced Machining Processes

with a consolidated score of **66 %**

Online Assignments	25/25	Proctored Exam	40.5/75
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Total number of candidates certified in this course: **799**

Aug-Oct 2023
(8 week course)



Congratulations!

NPTEL Examination Qualified 2023


Prince Singh
Mechanical


Awatansh Singh
Mechanical


VISHAL PANDEY
Mechanical


Manish Gupta
Mechanical


Shubham Yadav
Mechanical


Akash Pandey
Mechanical


Pratham Thawai
Mechanical

Faculty Achievement

- A project titled Filling machine tool (project no RP_03525G was awarded to Dr. L.R. Bhandarkar under Unnat Bharat Abhiyaan 2.0 program. The project was aimed at rural craft & artisans' development and was successfully completed at the department. The complete setup was handed over to the chairman Pussore Panchayat for utilization by any deserving artisan.



- Dr Mithlesh Kumar Sahu, Associate Professor and Dr Saroj Kumar, Assistant Professor, Department of Mechanical Engineering have attended the Five Day Short Term Training Program on "Scientific Writing and Publishing" from 31st July to 4th August 2023 organized by the Department of Civil & Environmental Engineering and the Department of Mechanical Engineering, Sarala Birla University, Ranchi.



- Dr Mukesh Desai, Associate Professor, Department of Mechanical Engineering attended a one-week International online workshop on "Research Methods and Methodology" from 17th to 24th August 2023 organised by Eudoxia Research University- USA, Eudoxia Research Centre, India.

The Department of Mechanical Engineering congratulates Dr Saroj Kumar, Assistant Professor in the Department of Mechanical Engineering for being recognised as an associate editor in the "Advances in Robotic Technology" Journal of Medwin Publishers, USA.

On the 18th of September 2023, during the Sixty-Two Teacher's Day Celebration, Dr. Sidharth S Chakrabarti, the Dean Academics and Dean- SoE, OPJU was honored with the prestigious "Excellent Teacher Award." This recognition was presented by the renowned national organization, "The Institution of Engineers (India), Chhattisgarh State Centre, Raipur." The event was graced by the presence of over 150 distinguished engineers, academicians, professors, scientists, and dignitaries representing various esteemed organizations.



Dr. Kuber Nath Mishra was awarded a certificate of appreciation for reviewing of research articles at ICAEIAT 2023 an international conference organised by MATS University Raipur on 1-2 Dec 2023



- Dr. Saroj Kumar, Dr. Kuber Nath Mishra & Ms Leena Behara were awarded Certificate of appreciation for their exceptional contribution in conduct a grand finale of Smart India Hackathon 2023 Software addition 19-20 Dec 2023

Dr. Mahesh Bhiwapurkar is successfully completing the AICTE Evaluated 2- Week Patent Course organised by Turnip innovations & Facilitated by Dr. Rahul Kapoor, founder of Turnip Innovations.



Academic Milestones Achieved

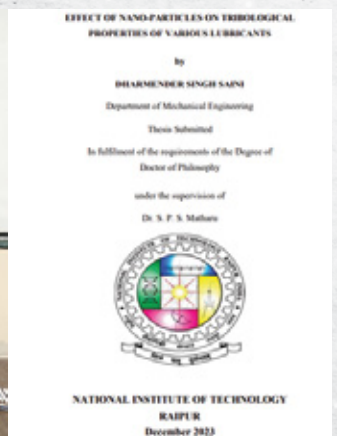
Ph.D Awarded

Dr. Ravindra Singh Saluja has been awarded Ph.D Degree from Birla Institute of Technology & Science, Pilani, on the convocation date 20th August 2023 held at K.K. Birla Goa Campus. His Significant contribution in the areas of Manufacturing & Industrial Engineering.



Ph.D Defended Successfully

Dr. Dharmendra Singh Saini has successfully defended his Ph.D. work on 8th Dec 2023. His Ph.D. work to examine the Effect of Nano-Particles on Tribological Properties of various lubricants under the guidance of Prof. (Dr.) S.P.S. Matharu, NIT Raipur.



New Initiative

In an effort to provide a gist of the cumulative information about the activities and happenings in the department, bi-annual newsletter "YANTRIKI" was launched on 28th September 2023. With Dr. Kuber Nath Mishra as chief editor and Dr. Ravindra Saluja, Dr. Satish Kanhed and Ms. Leena Behara as Editorial team members, the team has put in meticulous hours to bring this exciting newsletter to its readers. This newsletter promises to be a comprehensive resource for all diverse facets of activities happening in the department. The readers of this newsletter may be students, professionals, Tech enthusiasts, or just someone curious about the latest developments in this field, this newsletter offers valuable insights and exclusive content to cater readers from all walks of technology.



Upcoming Events

The department is going to organize a faculty development program on 'Energy Solutions for Sustainable Future' in the month of February 2024 (tentatively). The program will be aimed at To Bring together academicians, researchers, industrialists across the world on a common platform to present their findings related to research and development in the areas of Energy management and sustainable solutions for energy crisis.

An international conference aimed to bring together leading academic scientists, researchers, scholars, and industry experts to exchange and share their experiences and research work in the field of Mechanical Engineering is proposed to be held in December 2024. The conference will provide an interdisciplinary forum for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, concerns, practical challenges, encountered, and the solution adopted in their respective fields.

The Department of Mechanical Engineering, School of Engineering, OPJU is going to organized one International Conference entitled as **Mechanical Engineering International Conference 1.0 (MEICON-1.0)** the tentative month December 2024.



OPJU

UNIVERSITY OF STEEL TECHNOLOGY
AND MANAGEMENT

Centre of Excellence in Manufacturing & Automation (CoEMA)



Available Technologies @CoEMA

- Virtual Welding Simulator
- Shielded Metal Arc Welding (SMAW)
- Gas Metal Arc Welding (GMAW)
- Gas Tungsten Arc Welding (GTAW)
- Gas Welding / Brazing / Cutting
- Non-destructive testing
- Robotic Welding
- CNC Lathe
- CNC Wire Cut EDM



PROGRAMS OFFERED

- Certification Programs for Welding Engineers
- Training and certification programs for welders
- Industry Tailored Courses

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Contact Information

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Professor, Director CCET



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Associate Professor (Sr. Grade)



Dr. Mukesh Shyamkant Desai
Associate Professor



Prof. Anurag Vijaywargiya
Associate Professor & Registrar



Dr. L R Bhandarkar
Associate Professor



Dr. Umesh Kumar Vishwakarma
Associate Professor (Sr. Grade)



Dr. Ravindra Singh Saluja
Associate Professor



Dr. Mithilesh Kumar Sahu
Associate Professor



Dr. Satish Kanhed
Sr. Assistant Professor



Dr. Saroj Kumar
Assistant Professor



Dr. Kuber Nath Mishra
Assistant Professor



Prof. Akash Pandey
Sr. Assistant Professor



Dr. Dharmender Singh Saini
Assistant Professor



Prof. Jitesh Singh
Assistant Professor

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Lab In-Charge



Mrs. Leena Behara
Lab In-Charge



Mr. Santosh Jaltare
Lab In-Charge



Mr. Nitin Shrivastava
Lab In-Charge



Mr. Rupesh Verma
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Mr. Narendra Deshmukh
Lab In-Charge



Mr. Bharat Singh Kanwar
Lab Assistant



Mr. Prasant Ku Padhi
Lab Instructor



Mr. Shriakash Gupta
Training Executive

Supporting Staff

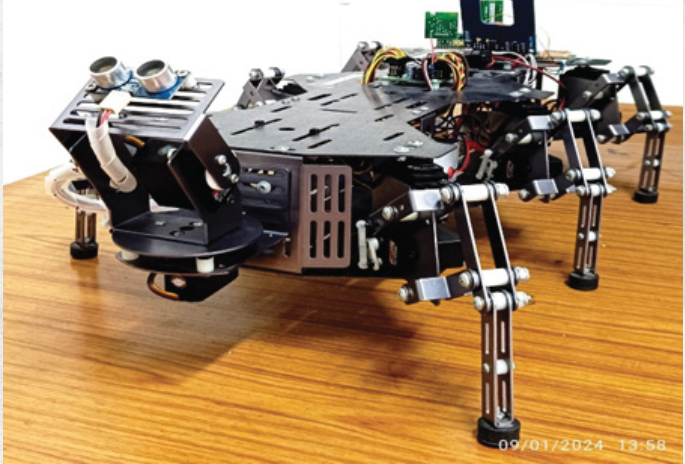


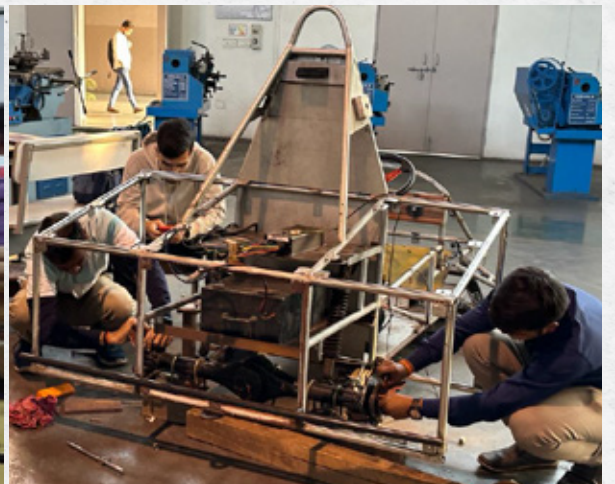
Mr. Sahebram Chouhan



Mr. Rajkumar Lakra

Photo Gallery







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Dr. Kuber Nath Mishra

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Dr. Ravindra Singh Saluja



Dr. Satish Kanhed



Mrs. Leena Behara



Mr. Arjun Gupta

Designer



Opju Mechanical



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